What is claimed is:

1. A handheld electric part handling device comprising:

a pair of first and second legs respectively provided, at their free ends, with contact pieces for holding the part therebetween; at least the first leg being movable toward and away from the second leg to close and open the legs; and

a first biasing member for biasing the first leg in the direction to close the legs.

2. A handheld device according to Claim 1, wherein the first biasing member is arranged to exert such a biasing force that the part held between the contact pieces will not drop by its self-weight.

3. A handheld device according to Claim 1, further comprising a second biasing member for biasing the first leg in the direction to open the legs, and a switching member for switching the biasing condition of the first leg between a normal biasing condition in which the second biasing member is effective, and a reverse biasing condition in which the first biasing member is effective.

4. A handheld device according to Claim 3 wherein a common biasing member serves as said first and second biasing members, and the switching member is arranged to switch the biasing direction of the common biasing member.

5. A handheld device according to Claim 4, wherein said movable leg is pivotally supported by a supporting shaft, the common biasing member is arranged to cause a moment in the movable leg to turn the movable leg around the supporting shaft, and the switching member is arranged to switch the direction of the moment between clockwise and counterclockwise directions .

6. A handheld device according to Claim 5 wherein said common biasing member includes a elastic member which generates a restoring force when it is deformed, the elastic member having one end connected to a first connection point fixed on the movable leg, and the other end connected to a second connection point movable by the switching member, the second movable point being moved by the switching member to assume opposite positions with respect to a line passing through the supporting shaft and the first connection point.

7. A handheld device according to Claim 6 wherein the biasing force of the second biasing member is larger than that of the first biasing member.

8. A handheld device according to Claim 1 wherein each leg includes a heater provided within the leg, and each leg is substantially straight from the heater including portion to an end of the contact piece.

9. A handheld device according to Claim 1 wherein the included angle of the legs in

closed condition is between 10° and 14°.

10. A handheld device according to Claim 9 wherein the included angle of the legs in closed condition is approximately 12°.

11. A handheld electric part handling device comprising:

a pair of first and second legs respectively provided, at their free ends, with contact pieces for holding the part therebetween; at least the first leg being movable toward and away from the second leg to close and open the legs;

a biasing member for biasing the first leg in a first direction to open the legs, and in a second direction to close the legs; and

a switching member for switching the biasing direction of the biasing member between the first and second directions.

12. A handheld electric part handling device according to Claim 11, further comprising a manipulation member manipulated to open or close the legs against the biasing force of the biasing member, the manipulation member having a first portion manipulated against the biasing force in the first direction, and a second portion manipulated against the biasing force in the second direction.

13. A handheld electric part handling device according to Claim 12, further comprising a housing on which the second leg is fixed, and a movable sleeve movable relative to the

housing and for holding the first leg, and wherein the movable sleeve is pivotally supported on a shaft to pivot around the shaft, the switching member includes a switching lever pivotally supported on the housing to swing between a first position and a second position, and the biasing member includes an elastic member extended between the switching lever and the movable sleeve to bias the movable sleeve in the first direction when the switching member is at the first position, and in the second direction when the switching member is at the second position.

14. A handheld electric part handling device according to Claim 13, wherein the elastic member includes a tension coil spring connected to the switching lever at a first connecting point and to the movable sleeve at a second connecting point and arranged such that the first connecting point is on one side of an imaginary line passing through the second connecting point and an axis of the shaft when the switching lever is at the first position, and that the first connecting point is on the other side of the imaginary line when the switching lever is at the second position.